FUJIFILM 1&I-Imaging & Information

FUJIFILM MEDICAL SYSTEMS USA, INC.

419 WEST AVENUE STAMFORD, CT 06902 Telephone: 203/324-2000

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510(K) Summary

In accordance with the requirements of the Safe Medical Device Act, FUJIFILM Medical Systems, USA, Inc. herewith submits a 510(K) summary of safety and effectiveness for the following device.

SUBMITTER NAME / ADDRESS:

FUJIFILM Medical Systems, USA, Inc.

419 West Avenue Stamford, CT 06902

CONTACT PERSON / TEL NO:

Frank Gianelli

Regulatory Coordinator

DATE SUMMARY PREPARED:

June 29, 2004

ESTABLISHMENT NO.:

2443168

TRADE/PROPRIETARY NAME:

Fuji Computed Radiography (FCR) ClearView CS

Image Reader (CR-IR363)

COMMON/USUAL NAME:

Computed Radiography Image Reader

CLASSIFICATION NAME:

Solid State X-Ray Imager

CLASS/PANEL:

Class II, 90-MQB, 21CFR 892.1650

PREDICATE DEVICE(S):

FCR 9000HQ Image Reader FCR 5501D Image Reader FCR 9000 Image Reader

DEVICE DESCRIPTION:

A Fuji Computed Radiography (FCR) system typically consists of an image reader (IR), patient ID terminal, imaging plates (IPs), IP cassettes, interface board, positioning monitor, laser printer for hard copy output, and optionally an image workstation, optical disk file, and network interface. This notification is for the image reader and associated imaging plates (IPs). IPs are used as two-dimensional radiation detectors in place of radiographic film and intensifying screens to capture a portion of the projected x-ray patient image. In the image reader, the captured image data is associated electronically with patient and exam identification data and the latent image is read by laser emission by the phenomenon of photostimulable luminescence. The photostimulated luminescence is then collected, detected, sampled, and digitized. The image data is then digitally processed according to exam and user-specified parameters and may be displayed on a CRT monitor to confirm patient positioning, printed by a hard copy device (such as laser printer, or dry printer), or output to a workstation, optical disk file, or other destination. The device performs no lossy compression of image data.

FCR ClearView CS consists of an Image Reader and Imaging Plates of various sizes and types (described below). The Image Reader is cassette-based. The IP is placed into a cassette and exposed using standard x-ray equipment. The cassette containing the exposed image plate is then manually inserted into the ClearView CS Image Reader. The image reader automatically removes the IP from the cassette and moves the IP to the reading position where it is scanned by a laser beam. The luminescence from the IP is then converted to an electrical signal by a photoelectron multiplier

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tube and then converted to a digital signal. After reading, the IP is erased, and reloaded into an empty cassette for subsequent exposure again.

As with other FCR image readers, the FCR ClearView CS will feature photostimulable phosphor imaging plates (IP) composed of europium activated barium fluorohalaid compounds in a crystal form held in an organic binder. The IP has a rigid substrate, which enables it to be held in a constant plane. The ClearView CS uses three types of IPs: type HR-BD for high resolution dual-side reading, type HR-V for high resolution reading, type ST-VI for standard resolution reading

INTENDED USE:

The indications for use of the Fuji Computed Radiography (FCR) ClearView CS Image Reader (CR-IR363) with Image Plate (IP) reading is the identification, capture, digitization, and processing of diagnostic x-ray images, and associating patient and exam identification with the images.

TECHNOLOGICAL CHARACTERISTICS:

The Fuji ClearView CS image reader is considered comparable and substantially equivalent to the Fuji FCR 9000HQ Image Reader, Fuji FCR5501D Image Reader and the Fuji FCR 9000 Image Reader.

PARAMETER	FCR ClearView CS		FCR 5501D		FCR 9000HQ			FCR 9000		
Image Recording										0
Patient Identification	Digital Data (from Console)		Digital Data (from Console)		Digital Data (from Console)			Digital Data (from Console)		
Recording Method	Photostimulable Luminescence		Photostimulable Luminescence		Photostimulable Luminescence					
No. of Imaging Plates/Cassette Slots	Four Cassette slots		Two Built-in Imaging Plates		One Cassette slot			One Cassette slot		
Image plate types and sizes	ST-VI 14"×17", 14"×14", 10"×12", 8"×10" HR-V 24cm×30cm, 18cm×24cm HR-BD 24cm×30cm, 18cm×24cm		ST-55BD 460x510 mm (usable area)		14"×14" 10"×12" 8"×10"				ST-VN 14"×17", 14"×14" 10"×12", 8"×10"	
					HR-V	8"x10"	1	HR-V	B"x10"	
						: 				
image Reading					<u> </u>			D		
Reading Method	Raster Scan (ST/HR). Raster Scan with dual-side detector(HR-BD)		Raster Scan with dual-side detector		Raster Scan			Raster Scan		
Reading Laser	Laser Diodes (660 nm)		Laser Diodes (680 nm)		Laser Diodes (675 nm)			Laser Diodes (675 nm)		
Gray Scale	10 bits (1024 gray levels)		10 bits (1024 gray levels)		10 bits (1024 gray levels)			10 bits (1024 gray levels)		
Sampling Raster	IP Reading Area	Pixels/mm	IP Reading Area	Pixels/mm	IP Rea	ding Area	Pixels/mm	l		Pixels/mm
	ST-VI 14"×17"	10	ST-55BD 17x17 in.	10	ST-VN	14"×17"	10	ST-VN	14"×17"	5
	ST-VI 14"×14"	10	ST-55BD 14x17 in.	10	ST-VN	14"×14"	10	ST-VN	14"×14"	5
	ST-VI 10"×12"	10	ST-55BD 14x14 in.	10	ST-VN	10"×12"	10	ST-VN	10"×12"	6.7
	ST-VI '8"×10"	10	ST-55BD 10x12 in.	10	ST-VN	8"×10"	10	ST-VN	8"×10"	10
	- HR-V 24cm×30cπ	10	ST-55BD 8x10 in.	10	HR-V	.8"×10"	10	HR-V	8"×10"	10
	HR-V 18cm×24cm	10	ST-55BD 18x43 cm	10		1	1	'		
	HR-BD 24cm×30cm 20		10240 0111		1		1	1		1
	HR-BD 18cm×24cm 20			1	1	†		1		
Physical										
WxHxD (mm)	655×740×1480 mm		1170x800x1800		950×750×1760 mm			950×750×1760 mm		
Weight (kg)	285 kg		540 kg		350 kg		350 kg			
Throughput (Approximate)	122 IP's/hr		150 IP's/hr		75 iP's/hr		110 IP's/hr			
Processing Time - 14"×14" IP	53 seconds		88 seconds		142 seconds			105 seconds		



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

AUG 2 5 2004

FUJIFILM Medical Systems USA, Inc. % Mr. William J. Sammons
Project Engineer
Underwriters Laboratories, Inc.
Research Triangle Park Division
12 Laboratory Drive
P.O. Box 13995
Research Triangle Park, NC 27709-3995

Re: K042023

Trade/Device Name: Fuji Computed Radiography (FCR)

Clear View CS Image Reader (CR-IR363)

Regulation Number: 21 CFR 892.1630 Regulation Name: Electrostatic x-ray imaging system

Regulatory Class: II Product Code: 90 MQB Dated: August 10, 2004 Received: August 11, 2004

Dear Mr. Sammons:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of the letter:

8xx.1xxx	(301) 594-4591			
876.2xxx, 3xxx, 4xxx, 5xxx	(301) 594-4616			
884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx	(301) 594-4616 (301) 594-4654			
892.2xxx, 3xxx, 4xxx, 5xxx				
Other	(301) 594-4692			

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html.

Sincerely yours,

Mancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

Indications For Use

510(k) Number (if known): K042023						
Device Name: FCR ClearView CS Image Reader (CR-IR363)						
Indications For Use:						
The indications for use of the Fuji Computed Radiography (FCR) ClearView CS Image Reader with Image Plate (IP) reading is the identification, capture, digitization, and processing of diagnostic x-ray images of the human body, and associating patient and exam identification with the images.						
Prescription Use X AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C)						
(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)						
Concurrence of CDRH, Office of Device Evaluation (ODE)						

(Division Sign-Off)
Division of Reproductive, Abdominal, and Radiological Devices

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